UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/650,649	08/28/2003	Travis J. Parry	200207015-1	7283
	7590 01/09/2008 CKARD COMPANY	EXAMINER		
P O BOX 272400, 3404 E. HARMONY ROAD			POLTORAK, PIOTR	
INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400		INISTRATION	ART UNIT	PAPER NUMBER
			2134	
		•		
			NOTIFICATION DATE	DELIVERY MODE
			01/09/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JERRY.SHORMA@HP.COM mkraft@hp.com ipa.mail@hp.com

				4		
		Application No.	Applicant(s)			
Office Action Summary		10/650,649	PARRY ET AL.			
		Examiner	Art Unit			
·		Peter Poltorak	2134			
Period for F	The MAILING DATE of this communication ap Reply	ppears on the cover sheet v	vith the correspondence address	•		
A SHOR WHICHE - Extensio after SIX - If NO per - Failure to Any reply	RTENED STATUTORY PERIOD FOR REPLEVER IS LONGER, FROM THE MAILING Ins of time may be available under the provisions of 37 CFR 1. (6) MONTHS from the mailing date of this communication, riod for reply is specified above, the maximum statutory period or reply within the set or extended period for reply will, by statury received by the Office later than three months after the mailinatent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUN. 136(a). In no event, however, may a d will apply and will expire SIX (6) MC te, cause the application to become A	ICATION. a reply be timely filed ONTHS from the mailing date of this communical ABANDONED (35 U.S.C. § 133).	-		
Status	•					
1)⊠ Re	esponsive to communication(s) filed on <u>17 (</u>	October 2007.				
2a)⊠ Th	This action is FINAL . 2b) This action is non-final.					
,						
clo	osed in accordance with the practice under	Ex parte Quayle, 1935 C.	D. 11, 453 O.G. 213.			
Disposition	of Claims					
4a 5)☐ CI 6)⊠ CI 7)⊠ CI	aim(s) <u>1-14,22-25,29,30 and 49-57</u> is/are p) Of the above claim(s) is/are withdra aim(s) is/are allowed. aim(s) <u>1,2,4-8,11,22-25,29,30,49 and 50</u> is/ aim(s) <u>3,9,10,12-14 and 54-57</u> is/are object aim(s) are subject to restriction and/	awn from consideration. /are rejected. ted to.				
Application	Papers					
10)□ Th Ap Re	e specification is objected to by the Examine drawing(s) filed on is/are: a) acoplicant may not request that any objection to the eplacement drawing sheet(s) including the correct e oath or declaration is objected to by the E	cepted or b) objected to be drawing(s) be held in abeyon ction is required if the drawing	ance. See 37 CFR 1.85(a). g(s) is objected to. See 37 CFR 1.12			
Priority und	der 35 U.S.C. § 119					
12) Ac a) 1. 1. 2. 3.	knowledgment is made of a claim for foreig	nts have been received. Its have been received in ority documents have been au (PCT Rule 17.2(a)).	Application No n received in this National Stage			
2) Notice o 3) Informat	f References Cited (PTO-892) f Draftsperson's Patent Drawing Review (PTO-948) ion Disclosure Statement(s) (PTO/SB/08) o(s)/Mail Date	Paper No	Summary (PTO-413) o(s)/Mail Date Informal Patent Application 			

U.S. Patent and Trademark Office PTOL-326 (Rev. 08-06)

Art Unit: 2134

DETAILED ACTION

1. The amendment received on 10/17/07 has been received and entered.

Response to Amendment

- 2. The amendment introduces new limitations to claims 1-14, 22-25 and 49-57, and incorporates the limitations of claim 30 into the independent claim 29. The newly introduced limitations required new search and/or consideration.
- In light of applicant's amendments and remarks the claim objections and the 35 USC
 § 112 rejections are withdrawn.
- 4. Applicant's arguments with respect to Garney in view of Usui rejection have been considered but are most in view of the new ground(s) of rejection of newly amended claims 1-14, 22-25 and 49-57.
- 5. In regard to Garney in view of Guy, applicant essentially argues the combination of these two references (e.g. pg. 11) and explicitly brings the attention to the fact that Garney's removable computer cards are not the same as "a printing device consumable".

The examiner carefully considered applicant arguments but did not find them persuasive. An ordinary artisan would appreciate that printers, such as disclosed by Guy, are computer systems (see Guy, Fig. 2, for example). An ordinary artisan would also readily recognize the fact that computer systems devices such as cards (disclosed by Garney) are "consumed" during the operation of the computer system (e.g. it is uncommon to replace a device, such as disclosed by Garney, that is worn out during while serving as the computer system component). The examiner also

Art Unit: 2134

points out that both inventions (Guy's and Garney's) are directed towards a device retrieving an identification key from a consumable component placed within a device, wherein the identification key enables the device to enable the device to utilize the component. Thus, the advantages of the systems of Guy and Garney could have been easily combinable with more than reasonable expectations of success.

6. Furthermore, the arguments pertaining to the rejection of the invention over Guy's and Garney's references are not persuasive because a close examination of the art of record indicates that the invention as claimed is obvious due to the following reasons:

Guy discloses a printing device consumable communicating with a printing device interface (e.g. Fig. 1), a printing device controller programmed to receive an identification key installed in said printing device (Fig. 1 and col. 2 lines 45-48), a locking mechanism for selectively rendering said printing device inoperable only if said identification key identifies a compatible printing device consumable (Guy, col. 3 lines 4-6). Although Guy does not explicitly disclose that the consumable device comprises memory, Garney discloses a consumable device comprising memory (Garney Fig. 3 and col. 6 lines 57-59). Both, invention (Guy's and Garney's) are directed towards a device retrieving an identification key from a consumable component placed within a device, wherein the identification key enables the device to enable the device to utilize the component. Thus, the advantages of the systems of Guy and Garney could have been easily combinable with more than a reasonable

Art Unit: 2134

expectations of success. Furthermore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to include memory disclosed by Garney in the consumable device disclosed by Guy given the benefit of enabling the consumable device to store additional information (e.g. CIS identity code).

- 7. Applicant arguments towards the newly amended claim 4 (and dependent claim 9) are addressed in this Office Action, below.
- 8. As per claims 22 and 29, applicant appears to once again argue the combination of Garney's and Guy's invention.

This argument has been addressed above.

- 9. Applicant arguments directed towards claims 3 and 9 are found persuasive and the previous rejections are withdrawn.
- 10. Claims 1-14, 22-25, 29-30 and 49-57 have been examined.
- 11. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Objections

- 12. Claim 30 is objected to because it fails to further limit claim 29 since all limitations of claim 30 are added into original claim 29, on which claim 30 depends.
- 13. The term: "pervious" in claim 57 should be "previous".

Appropriate correction is required.

Art Unit: 2134

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Page 5

14. Claims 1-2, 4-5, 9-10 and 22-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Haines (USPN 6738903).

Haines (USPN 6738903) discloses a printing device consumable (toner cartridge 32), a memory coupled to said printing device consumable (36)storing an identification key (authorization code 52) for identifying said printing device consumable with respect to said printing device (e.g. col. 2 lines 58-62, Fig. 3 and associated text). Haines discloses that the printing device consumable is unusable until the identification key is verified (e.g. col. 2 lines 62-63, col. 5 lines 38-53). Since in the referred citations Haines clearly discloses that in case the identification key is not verified (authentication code invalid) the "normal" operation of the printing device is <u>not</u> enabled, this unambiguously suggests the presence of "a locking mechanism" that when disengaged renders the printing device consumable and/or printing device usable. Haines discloses the wireless interface used in communication between the consumable and the printing device (e.g., col. 4 lines 5-10, 24-25 and 40-43).

Claim Rejections - 35 USC § 103

15. Claims 1-2, 4-8, 11 and 22-25 and 49-50 are newly rejected under 35 U.S.C. 103(a) as being unpatentable over Wright (USPN 5807005) in view of Nagata (USPUB 2002/0077979).

As per claims 1 and 22 in col. 1 line 60- col. 2 line 10, Wright discloses as follows:

"The present invention further includes a cartridge lockout method that includes the steps of receiving a machine class code stored in a memory of the printer engine and receiving a cartridge class code from the cartridge and comparing the machine and cartridge codes to determine whether the print cartridge can be used for printing. If a print job is pending in the printer and the cartridge class code has not been identified or the machine class code does not match the cartridge class code, a lockout indicator is activated to prevent printing with the cartridge. If the machine class code and the cartridge class code match, a print job is permitted to print if the lockout indicator is inactive. The foregoing process is repeated for the next print job by first determining whether the cartridge class code has been identified."

This reads on storing an identification key in a printing device consumable, receiving the identification key in a printing device and accepting said printing device consumable for use in said printing device only if said identification key identifies a compatible printing device consumable. It also reads on a locking mechanism that, when locked, disables either the printing device consumable or the printing device.

16. The accepting the printing device consumable in Wright's invention comprises locking the locking mechanism rather than unlocking a locked locking mechanism. However, Wright's invention aims to use a locking mechanism to prevent printing when a non compatible printing device consumable is detected and there are inherently two choices: to keep the locking mechanism unlock and locking it when a compatible printing device consumable is detected or to keep the locking

Art Unit: 2134

mechanism unlock and locking it upon detection of a non compatible printing device consumable. A person with ordinary skill has good reason to pursue any of these options within his or her technical grasp given the fact that either of this implementation would have been an obvious variation of each other and would not affect the invention's functionality.

17. Wright does not explicitly disclose memory affixed to the printing device consumable.

Nagata discloses memory affixed to the printing device consumable (Nagata, [0256]). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to include memory affixed to the printing device consumable as disclosed by Nagata given the benefit of providing additional information (e.g. recycle data, [0971]).

- 18. As per claims 2, 5-8 and 11, Wright discloses checking the identification key against a list of authorized keys for the printing device stored in the printing device memory (e.g. Wright, col. 1 line 60- col. 2 line 10 and col. 3 line 45- col. 4 line 67).
- 19. As per claims 23-25, electronic components inherently comprise interfaces in order to communicate data (e.g. to read data from a component) and both wired and wireless interfaces are old and well known in the art computing, either of which would have been an obvious variation of each other. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to include a wired interface given the benefit of cost saving and wireless given the benefit of communication flexibility.

Art Unit: 2134

- 20. The limitations of claim 4 are at least implicit, if not inherent. Printers are frequently powered down when moved and/or maintained which would trigger reengaging the locking mechanism and re-verifying the identification key, see (Wright, col. 5 lines 19-26).
- 21. Additionally, as per claim 49-50, the examiner consider the terms "disengaging" and "unlocking" to be synonyms directed to removal of the locking mechanism and points out that in there are inherently two types of locking mechanisms: electronic (e.g. file access permissions) and mechanical (e.g. Lo, USPN 6097405). Both of these locks are well known in the art and selecting any of these locks would have been an obvious variation of each other and would not affect the invention functionality.
- 22. As per claim 49-50, the examiner consider the terms "disengaging" and "unlocking" to be synonyms directed to removal of the locking mechanism and points out that in there are inherently two types of locking mechanisms: electronic (e.g. file access permissions) and mechanical (e.g. Lo, USPN 6097405). Both of these locks are well known in the art and selecting any of these locks would have been an obvious variation of each other and would not affect the invention functionality.
- 23. Claims 1-2, 4-8, 11, 22-25 and 29-30 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Garney (USPN 6081850) in view of Guy (USPN 6529691). In col. 6 line 52- col. 7 line 5 Garney teaches as follows:

"Referring now to FIG. 3, the structure of a typical feature card 301 is illustrated. Feature card 301 includes an interface 302 with which the feature card 301 may be removably electrically coupled to a computer system. Feature card 301 also includes a card memory area 303. Card memory area 303 includes a card information structure (CIS) 305. CIS 305 includes a CIS

Art Unit: 2134

identity code 306, link data 307 and <u>a card unique identification 308</u>. CIS identity code 306 and link data 307 are used to recognize the feature card 301. As will be explained below in greater detail, <u>card unique identification field 308 contains a card identifier which is used by a device driver loader to locate the device driver for the card. The device driver provides all of the device driver functionality necessary to control each and every function of the feature card. The card unique identification field 308 contents must be different for every type of feature card in a system. However, if two feature cards in the system may use the same device driver, then they may have the same card unique identification field 308 contents. It is also possible for there to be more than one card identifier and device driver for a given card."</u>

which reads on a device interface configured to communicate with a memory affixed to a device consumable installed in the device, the device controller programmed to receive an identification key from said memory through said printing device interface to identify said printing device consumable (the device is a computer system. Thus, it inherently includes a processor that uses a computer program enabling an identification key from the memory of the consumable device to reach the device's hardware components, e.g. RAM).

In col. 1 lines 37-45 and col. 4 lines 28-38 Garney discloses that the consumable devices are devices facilitating the device a particular functionality (operation). For example Garney discloses the consumable device to be "computer network interface card" (NIC) and an ordinary artisan would readily recognize that a computer system with a NIC that responds to the computer system makes the system operable to communicate over a network. Fig. 7-13 with the associated text teaches that a device driver loader loads an appropriate driver (a program routine that enables the device to communicate/use the consumable device that corresponds to the

identification obtained from the memory of the consumable device). It also teaches that if no driver is found for the consumable device no driver enabling communication with the consumable device is available. Furthermore, Garney discloses that the access to the appropriate driver is terminated upon the compatible consumable device removal.

Thus, it is clear that there is a locking mechanism (preventing access to a consumable device, which renders the device inoperable) and that the device controller is programmed to unlock the locking mechanism only if the identification key identifies a compatible device consumable (the processor reverses the process when using the consumable device identification key the appropriate driver is found and loaded, making the device operable).

24. Garney does not disclose that the device is a <u>printing</u> device and that the device consumable is a <u>printing</u> device consumable.

Guy discloses a printing device and a printing device consumable. Both: Garney's and Guy's systems are computing systems wherein a device receives and compares a consumable device identification (e.g. Guy, Fig. 2 and col. 2 line 12 – col. 3 line 13). Thus, the advantages of the systems of Garney and Guy could have been easily combinable with more than a reasonable expectations of success.

Additionally, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement Garney's invention into the print device and print device consumable as taught by Guy given the benefit of dynamically configuring printing system resources.

Art Unit: 2134

The examiner also points out that combination Guy and Garney references does not render claims 29-30 obvious because Guy discloses a printing device consumable communicating with a printing device interface (e.g. Fig. 1), a printing device controller programmed to receive an identification key installed in said printing device (Fig. 1 and col. 2 lines 45-48), a locking mechanism for selectively rendering said printing device inoperable only if said identification key identifies a compatible printing device consumable (Guy, col. 3 lines 4-6). Although Guy does not explicitly disclose that the consumable device comprises memory. Garney discloses a consumable device comprising memory (Garney Fig. 3 and col. 6 lines 57-59). Both, invention (Guy's and Garney's) are directed towards a device retrieving an identification key from a consumable component placed within a device, wherein the identification key enables the device to enable the device to utilize the component. Thus, the advantages of the systems of Guy and Garney could have been easily combinable with more than a reasonable expectations of success. Furthermore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to include memory disclosed by Garney in the consumable device disclosed by Guy given the benefit of enabling the consumable device to store additional information (e.g. CIS identity code).

25. As per claims 49-50, the examiner consider the terms "disengaging" and "unlocking" to be synonyms directed to removal of the locking mechanism and points out that in there are inherently two types of locking mechanisms: electronic (e.g. file access

Art Unit: 2134

permissions) and mechanical (e.g. Lo, USPN 6097405). Both of these locks are well known in the art and selecting any of these locks would have been an obvious variation of each other and would not affect the invention functionality.

26. The limitations of claim 4 are at least implicit, if not inherent. Printers are frequently powered down when moved and/or maintained which would trigger the printer to reverify the identification key.

Conclusion

Claims 3,9,10,12-14 and 54-57 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2134

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Page 13

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Poltorak whose telephone number is (571) 272-3840. The examiner can normally be reached Monday through Thursday from 9:00 a.m. to 4:00 p.m. and alternate Fridays from 9:00 a.m. to 3:30 p.m

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on (571) 272-3811. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

My 1/31/07

NASSER MOAZZAMI SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2100

1/2/08